

An aerial photograph of a rural landscape at sunrise. The scene is filled with mist and golden sunbeams filtering through the trees. In the foreground, a paved road curves through a green field. Several houses and a barn are visible in the middle ground. The overall atmosphere is peaceful and serene.

CORNING

# On a Mission to Extend Broadband: Public-Private Partnerships Rise to the Challenge

# Contents

I. The Challenge Remains .....	3
II. A Growing Community of Willing Partners .....	6
III. Key Considerations for PPPs.....	10
IV. Conclusion .....	12



# The Challenge Remains



## The Challenge Remains

While there has been much progress in building broadband to the underserved and unserved, there are still vast numbers of communities that lack adequate broadband. It's a challenge that must be overcome if the U.S. is to reach its full potential. Resolving it will require creative approaches and partnership between public entities and the private sector.

## Understanding the Digital Divide

According to research from US Ignite, 1 in 3 communities in the U.S. is either unserved or underserved. The vast majority of those communities are in smaller towns with 1K or fewer households<sup>1</sup>.



## The Consequences of Inaction

The impact of poor broadband coverage on educational achievement is stark. According to a Michigan State University study, the gap in digital skills between students with no home internet access or cell phone only and those with home Internet access is equivalent to the gap in digital skills between 8th and 11th grade students<sup>2</sup>.

## Giving All Communities a Shot in the 21st Century and Beyond

Results from a recent study from the University of Missouri concluded that the availability of broadband boosts employment for any given rural community. More specifically, the adoption of wired broadband boosts rural employment even more.

This research studied U.S. counties with populations of less than 20,000. Looking at the entire U.S. population, these rural counties make up 53% of all U.S. counties and about 9% of the entire U.S. population.

The April – May 2020 research study found that a 1% increase in broadband availability led to a .37% increase in the employment rate of these counties. For wired broadband, the correlation was even higher, with a .87% increase in rural employment for every 1% increase in wired broadband adoption.<sup>3</sup>

In a similar 2019 research study, the University of Tennessee at Chattanooga and Oklahoma State University concluded that counties lacking high speed broadband have smaller populations and population density, lower household income, and a slightly smaller proportion of people with at least a high school diploma.<sup>4</sup>





A Growing Community of Willing Partners

## A Growing Community of Willing Partners

There are a growing number of public-private partnership examples that include a diverse group of partners, from operating ISPs to investment firms. Examples include:

- Zayo Bandwidth and Anoka County, Minnesota, plan to build a middle mile network that will make high-speed broadband services available to governments, businesses, community anchor institutions, and local ISPs.
- The state of Vermont has established communications union districts (CUDs), which are a municipal entity comprised of two or more towns, to fund broadband networks in partnership with operating ISPs.
- The state of Maine is partnering with Arctaris Impact Investors, LLC to build new fiber broadband networks in unserved and economically distressed rural, urban, and suburban areas, including designated opportunity zones.



## Public Private Partnership (PPP) Models

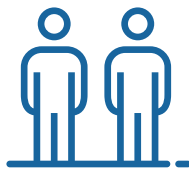
While there are many variations of public private partnerships, they all generally fall into a few categories:



**Public Infrastructure — Private Service Model** — In this model, a city or municipality invests in and owns broadband network infrastructure and invites one or more private service providers to lease/rent that infrastructure to deliver service to citizens and businesses.



**Joint Ownership Model** — in this model, public and private interests jointly invest in the development of broadband infrastructure to serve the community, with some form of mutual ownership. For example, the public entity may own the transport network while the private entity owns the last mile infrastructure.



**Private Ownership Model** — in this model, a private entity commits to building and owning broadband network infrastructure, and the public entity partner agrees to contribute towards that investment, either monetarily (using government grant money in some cases), through guaranteed service agreements, or through some other in-kind contributions that help the private partner make the business case.





## Service Providers Embrace the Model

While PPPs have been quite common among smaller community service providers, more recently, larger carriers are now embracing the model as well:

- Consolidated Communications has been quite active in the Northeast with PPP models<sup>5</sup>.
- AT&T recently signed PPP agreements with Vanderburgh County in Indiana for a \$39 million project<sup>6</sup>.
- Windstream is actively recruiting for PPP opportunities<sup>7</sup>.
- Charter Communications entered into a PPP with Scott County in Kentucky to build and operate a \$21 million fiber network<sup>8</sup>.

## Funding Programs Can Help Fuel PPPs

New funding programs are adding momentum to the PPP movement. For example, the \$10 billion Coronavirus Capital Projects Fund, administered through the U.S. Treasury, encourages use of public, nonprofit, and cooperative networks. Similarly, the \$288 million Broadband Infrastructure Grant Program, administered through NTIA, targets partnerships between governments and fixed broadband providers, including public, nonprofit, and cooperative providers.



An aerial photograph of a train crossing a bridge over a wide river. The scene is captured at sunrise, with a warm, golden glow over the water and the surrounding landscape. The train consists of several white passenger cars and a dark locomotive. The bridge has a central section with a white railing. The river is calm, reflecting the light from the sky. The background shows a hazy horizon with some distant structures and trees.

# Key Considerations for PPPs

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As various stakeholders study the PPP approach, there are several key considerations to recognize.

### Begin With the End in Mind

There are many possible paths for PPPs, all of which have their unique complexities. Ensuring that end goals are meticulously defined and that all stakeholders share the same vision is critical for long term success.

### Adhere to Best Practices

Luckily, the momentum for PPPs has generated some prevailing best practices. Here are a few:

- Establish a collaborative effort that includes local broadband champions, community stakeholders and private sector leaders, and that ensures everyday citizens have representation.
- Leverage a comprehensive feasibility study to introduce the data necessary to make the most informed decisions.
- Uncover and inventory all available local assets, physical and otherwise.
- Be open to exploring all available PPP models and select the one that makes the most sense to all stakeholders.
- Develop and execute a comprehensive communications plan that is transparent and reaches all levels of participating partners.
- Interview and select vendor partners that have experience in working with PPPs.
- Build contingency plans and recognize that the best laid PPP plans will encounter roadblocks and disruptions.
- Ensure the plan includes a digital inclusion action plan, ensuring no citizenry is left behind.

# Conclusion



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There is still much work to do to close the digital divide and ensure that citizens, no matter where they live or their economic circumstance, have the opportunity to flourish. Public-Private Partnerships can play a key role in helping achieve this important mission. Indeed, the future is bright for PPPs, but proper planning and execution are key for long-term success.

## Sources

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<sup>2</sup> BROADBAND AND STUDENT PERFORMANCE GAPS, Michigan State University, <http://quello.msu.edu/broadbandgap/>

<sup>3</sup> Broadband adoption and availability: Impacts on rural employment during COVID-19, <https://www.sciencedirect.com/science/article/pii/S0308596122000143?via%3Dihub>

<sup>4</sup> Study: Broadband Reduces Unemployment, Especially in Rural Areas, <https://www.telecompetitor.com/study-broadband-reduces-unemployment-especially-in-rural-areas/>

<sup>5</sup> Consolidated Gains Eight More Public-Private Broadband Partnerships, <https://www.telecompetitor.com/consolidated-gains-eight-more-public-private-broadband-partnerships/>

<sup>6</sup> AT&T Brings High-Speed Internet to Vanderburgh County, [https://about.att.com/story/2021/att\\_fiber\\_vanderburgh\\_county.html](https://about.att.com/story/2021/att_fiber_vanderburgh_county.html)

<sup>7</sup> Connect Your Community. Count on Kinetic, <https://business.windstream.com/rural-broadband-funding#/>

<sup>8</sup> \$20m county broadband expansion plans unveiled, [https://www.news-graphic.com/news/20m-county-broadband-expansion-plans-unveiled/article\\_ef3fea42-f3d1-11eb-801a-27173beb41c7.html](https://www.news-graphic.com/news/20m-county-broadband-expansion-plans-unveiled/article_ef3fea42-f3d1-11eb-801a-27173beb41c7.html)

An aerial photograph of a rural landscape featuring rolling green hills, scattered houses, and dense forests. The scene is bathed in a soft, golden light, suggesting early morning or late afternoon. A prominent blue square is overlaid in the center of the image, containing the word "CORNING" in white, serif, all-caps font.

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